

PART B - FEE(S) TRANSMITTAL

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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7590

09/03/2004

ROBERT E BUSHNELL
 1522 K STREET, N.W. SUITE 300
 WASHINGTON, DC 200051202



10/01/2004 SSITH1B2 00000239 08931125

01 FC:1501

1330.00 OP

02 FC:1504

300.00 OP

Certificate of Mailing or Transmission

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/931,125	09/16/1997	HAE-SEUNG LEE	P54508	3842

3. TITLE OF INVENTION: MEMORY SYSTEM FOR IMPROVING DATA INPUT/OUTPUT PERFORMANCE AND METHOD OF CACHING DATA RECOVERY INFORMATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	12/03/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
PORTKA, GARY J	2188	711-114000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Robert E. Bushnell, Esq.

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

SAMSUNG ELECTRONICS CO., LTD.

Suwon-city, Gyeonggi-do, KOREA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☒ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
 NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Date 30 September 2004

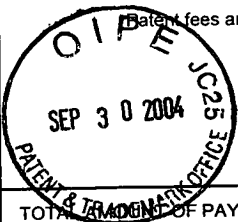
Typed or printed name Robert E. Bushnell

Registration No. 27,774

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

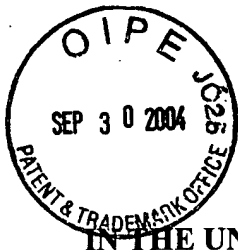
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<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any deficiencies:</p> <p>Deposit Account Number: <u>02-4943</u></p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 C.F.R. §1.16 and 1.17.</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p>		<p>3. ADDITIONAL FEES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge-late filing fee or oath</td> <td>\$</td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge-late provisional filing fee or cover sheet</td> <td>\$</td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> <td>\$</td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For filing a request for reexamination</td> <td>\$</td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td>\$</td> </tr> <tr> <td>1805</td> <td>1,840 *</td> <td>1805</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td>\$</td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> <td>\$</td> </tr> <tr> <td>1252</td> <td>420</td> <td>2252</td> <td>210</td> <td>Extension for reply within second month</td> <td>\$</td> </tr> <tr> <td>1253</td> <td>950</td> <td>2253</td> <td>475</td> <td>Extension for reply within third month</td> <td>\$</td> </tr> <tr> <td>1254</td> <td>1,480</td> <td>2254</td> <td>740</td> <td>Extension for reply within fourth month</td> <td>\$</td> </tr> <tr> <td>1255</td> <td>2,010</td> <td>2255</td> <td>1,005</td> <td>Extension for reply within fifth month</td> <td>\$</td> </tr> <tr> <td>1401</td> <td>330</td> <td>2401</td> <td>165</td> <td>Notice of Appeal</td> <td>\$</td> </tr> <tr> <td>1402</td> <td>330</td> <td>2402</td> <td>165</td> <td>Filing a brief in support of an appeal</td> <td>\$</td> </tr> <tr> <td>1403</td> <td>290</td> <td>2403</td> <td>145</td> <td>Request for oral hearing</td> <td>\$</td> </tr> <tr> <td>1451</td> <td>1,510</td> <td>1451</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> <td>\$</td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td>Petition to revive - unavoidable</td> <td>\$</td> </tr> <tr> <td>1453</td> <td>1,330</td> <td>2453</td> <td>665</td> <td>Petition to revive - unintentional</td> <td>\$</td> </tr> <tr> <td>1501</td> <td>1,330</td> <td>2501</td> <td>665</td> <td>Utility issue fee (or reissue)</td> <td>\$1,330.00</td> </tr> <tr> <td>1502</td> <td>480</td> <td>2502</td> <td>240</td> <td>Design issue fee</td> <td>\$</td> </tr> <tr> <td>1503</td> <td>640</td> <td>2503</td> <td>320</td> <td>Plant issue fee</td> <td>\$</td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td>Petitions to the Commissioner</td> <td>\$</td> </tr> <tr> <td>1504</td> <td>300</td> <td>1504</td> <td>300</td> <td>Publication fee for early, voluntary, or normal publication</td> <td>\$ 300.00</td> </tr> <tr> <td>1806</td> <td>180</td> <td>1806</td> <td>180</td> <td>Submission of Information Disclosure Statement</td> <td>\$</td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td>Recording each patent assignment per property (Times number of properties)</td> <td>\$</td> </tr> <tr> <td>1809</td> <td>770</td> <td>2809</td> <td>385</td> <td>Filing a submission after final rejection (37 C.F.R. §1.129(a))</td> <td>\$</td> </tr> <tr> <td>1810</td> <td>770</td> <td>2810</td> <td>385</td> <td>For each additional invention to be examined (37 C.F.R. §1.129(b))</td> <td>\$</td> </tr> <tr> <td>1801</td> <td>770</td> <td>2801</td> <td>385</td> <td>Request for Continued Examination (RCE)</td> <td>\$</td> </tr> <tr> <td>8001</td> <td>3</td> <td></td> <td></td> <td>Printed copy of patent w/o color</td> <td>\$</td> </tr> <tr> <td colspan="4">Other Fee (specify) _____</td> <td></td> <td>\$</td> </tr> <tr> <td colspan="4"> <p>** Reduced by Basic Filing Fee Paid</p> </td> <td colspan="2" style="text-align: right;"> <p>SUBTOTAL (3) \$1630.00</p> </td> </tr> <tr> <td colspan="2" style="text-align: center; font-weight: bold;">SUBMITTED BY</td> <td colspan="4" style="text-align: center; font-weight: bold;">Complete (if applicable)</td> </tr> <tr> <td colspan="2"> <p>Typed or Printed Name</p> <p style="text-align: center;">Robert E. Bushnell, Esq.</p> </td> <td colspan="2"> <p>Reg. Number</p> <p style="text-align: center;">27,774</p> </td> <td colspan="2"></td> </tr> <tr> <td colspan="2"> <p>Signature</p> <p style="text-align: center;"><i>Robert E. Bushnell</i></p> </td> <td> <p>Date</p> <p style="text-align: center;">September 30, 2004</p> </td> <td colspan="3"> <p>Deposit Account User ID</p> </td> </tr> </tbody> </table>		Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	65	Surcharge-late filing fee or oath	\$	1052	50	2052	25	Surcharge-late provisional filing fee or cover sheet	\$	1053	130	1053	130	Non-English specification	\$	1812	2,520	1812	2,520	For filing a request for reexamination	\$	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	\$	1805	1,840 *	1805	1,840*	Requesting publication of SIR after Examiner action	\$	1251	110	2251	55	Extension for reply within first month	\$	1252	420	2252	210	Extension for reply within second month	\$	1253	950	2253	475	Extension for reply within third month	\$	1254	1,480	2254	740	Extension for reply within fourth month	\$	1255	2,010	2255	1,005	Extension for reply within fifth month	\$	1401	330	2401	165	Notice of Appeal	\$	1402	330	2402	165	Filing a brief in support of an appeal	\$	1403	290	2403	145	Request for oral hearing	\$	1451	1,510	1451	1,510	Petition to institute a public use proceeding	\$	1452	110	2452	55	Petition to revive - unavoidable	\$	1453	1,330	2453	665	Petition to revive - unintentional	\$	1501	1,330	2501	665	Utility issue fee (or reissue)	\$1,330.00	1502	480	2502	240	Design issue fee	\$	1503	640	2503	320	Plant issue fee	\$	1460	130	1460	130	Petitions to the Commissioner	\$	1504	300	1504	300	Publication fee for early, voluntary, or normal publication	\$ 300.00	1806	180	1806	180	Submission of Information Disclosure Statement	\$	8021	40	8021	40	Recording each patent assignment per property (Times number of properties)	\$	1809	770	2809	385	Filing a submission after final rejection (37 C.F.R. §1.129(a))	\$	1810	770	2810	385	For each additional invention to be examined (37 C.F.R. §1.129(b))	\$	1801	770	2801	385	Request for Continued Examination (RCE)	\$	8001	3			Printed copy of patent w/o color	\$	Other Fee (specify) _____					\$	<p>** Reduced by Basic Filing Fee Paid</p>				<p>SUBTOTAL (3) \$1630.00</p>		SUBMITTED BY		Complete (if applicable)				<p>Typed or Printed Name</p> <p style="text-align: center;">Robert E. 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REB/ny

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Patent
P54508

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

HAE-SEUNG LEE

Serial No.: 08/931,125

Examiner: PORTKA, GARY J

Filed: 16 September 1997

Art Unit: 2188

For: MEMORY SYSTEM FOR IMPROVING DATA INPUT/OUTPUT
PERFORMANCE AND METHOD OF CACHING DATA RECOVERY
INFORMATION

ISSUE FEE AND PUBLICATION FEE TRANSMITTAL

Mail Stop : ISSUE FEE

Commissioner for Patents

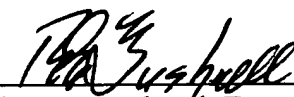
P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This transmittal accompanies a signed Issue Fee Transmittal, PTOL-85, and Applicant's check drawn to the order of the Commissioner of Patents & Trademarks in the amount of U.S. \$1,330.00, including a fee of \$300.00 for Publication Fee.

Respectfully submitted,



Robert E. Bushnell, Esq.
Reg. No.: 27,774

1522 "K" Street, N.W., Suite 300
Washington, D.C. 20005
(202)-408-9040

Enclosures: Issue Fee Transmittal, PTOL-85B, and check No.48145

Folio: P54508

Date: September 30, 2004

REB/ny